Aim: To perform the concept of cursor

(a) Display all the information of EMP table using %ROWTYPE.

(b) Create a PL/SQL block that does the following:

In a PL/SQL block, retrieve the name, salary, and MANAGER ID of the employees working in the particular department. Take Department Id from user.

If the salary of the employee is less than 1000 and if the manager ID is either 7902 or 7839, display the message <<last name>> Due for a raise. Otherwise, display the message <<last_name>> Not due for a raise.

(c) In a loop, use a cursor to retrieve the department number and the department name from the DEPT table for those departments whose DEPT_ID is less than 100. Pass the department number to another cursor to retrieve from the EMP table the details of employee name, job, hire date, and salary of those employees whose EMP_NO is less than 7566 and who work in that department

i)

Query:

declare
 cursor c1 is select * from employee;
 v1 c1%rowtype;
begin
    open c1;
 loop
    fetch c1 into v1;
    exit when c1%notfound;
 dbms_output.put_line(v1.emp_no || ' ' || v1.emp_name || ' ' ||v1.emp_sal || ' '
||v1.emp_comm || ' ' ||v1.dept_no ||' ' || v1.l_name || ' ' ||v1.dept_name || ' '
||v1.job_id || ' ' ||v1.location || ' ' ||v1.manager_id || ' ' ||v1.hiredate);
 end loop;
 close c1;
end;

Output:

ii)

Query:

```
declare
D_no number:=:ENter_no;
 cursor c2 is select emp_name,emp_sal,manager_id from employee where
DEPT_NO=D_no;
 v2 c2%rowtype;
begin
   open c2;
 loop
   fetch c2 into v2;
 if v2.emp_sal<1000 and (v2.manager_id = 7902 or v2.manager_id = 7839)
then
      dbms_output.put_line(v2.emp_name|| ' It is for raise.');
 else
 dbms_output.put_line(v2.emp_name|| ' It is not for raise.');
 end if;
 exit when c2%notfound;
 end loop;
```

```
  close c2;
end;
```

Output:

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```
    fetch c2 into v2;
 if v2.emp_sal<1000 and (v2.manager_id = 7902 or v2.manager_id = 7839) then
        dbms_output.put_line(v2.emp_name|| ' It is for raise.');
 else
  dbms_output.put_line(v2.emp_name|| ' It is not for raise.');
 end if;
 exit when c2%notfound;
 end loop;
 close c2;
end;
```

Results **Explain** **Describe** **Saved SQL** **History**

```
It is not for raise.
```

iii)

Query-Output:

```
declare
cursor c1 is select dept_no, dept_name from employee where dept_no < 100;
cursor c2(d_id employee.dept_no%type) is select emp_no, emp_name, emp_sal, job_id, hiredate from employee where emp_no < 7566 and dept_no = d_id;

dept_id varchar(10);
dept_name employee.dept_name%type;
emp_no employee.emp_no%type;
emp_name employee.emp_name%type;
emp_sal employee.emp_sal%type;
job employee.job_id%type;
hire_date employee.hiredate%type;

begin
```

Results Explain Describe Saved SQL History

```
Department: 10-machine learing
Department: 25-data science
Department: 20-machine learing
Department: 10-virtual reality
Department: 10-big data analysis
Department: 10-big data analysis
Department: 30-artificial intelligence

Statement processed.

0.00 seconds
```

Conclusion: By performing this practical, I got to learn about concept of %rowtype and how to create cursor and use it to fetch the original table information using the cursor in PL-SQL Block.

Staff Signature:

Grade:

Remarks by the Staff: